Digital Narrative in Costa Rica: Perception of President Rodrigo Chaves and the Executive Branch through X and YouTube, July 2024 to January 2025.

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I. ABTRACT

This study analyzes public perception of President Rodrigo Chaves and the Executive Branch of Costa Rica, using natural language processing (NLP) techniques applied to news articles, replies, and posts (videos) on the X platform (formerly Twitter) and YouTube. News, replies to tweets related to the president or the Executive Branch, and comments from videos on the official YouTube channel of the Presidency were collected. Sentiment analysis models were implemented to classify news and comments as positive, negative, or neutral, with special attention given to local linguistic phenomena such as sarcasm, nicknames, and the use of emojis.

Results show that on X, 82.04% of the news related to the president and the government maintained a neutral tone, 12.51% reflected negative sentiments—mainly on topics such as security, corruption, and presidential rhetoric—and 5.45% presented a positive evaluation. In the replies, a frequent use of nicknames and sarcastic expressions was observed, aiming to ridicule the president and evidencing strategies of disapproval toward his figure. In contrast, comments on YouTube reflected a more positive perception, characterized using religious expressions and respectful terms towards the president, consolidating a narrative of support based on values of faith and patriotism.

The analysis reveals a significant divergence in the perception of President Rodrigo Chaves and the Executive Branch depending on the social platform used and highlights the need to adapt NLP models to specific sociocultural contexts by integrating the detection of sarcasm, slang, and visual elements to improve sentiment analysis accuracy in studies of governmental perception.

Keywords: Sentiment Analysis, Executive Power, President Rodrigo Chaves, Natural Language Processing (NLP), Social Media, Sarcasm, Colloquial Language

II. INTRODUCTION

Communication is a fundamental interdisciplinary field in the construction of social reality. According to Craig (1999), "communication is a field of study that analyzes how messages create, maintain, and transform social meanings in specific contexts." This perspective highlights its dynamic and interactive nature, emphasizing its impact on the transmission of information and the shaping of public opinion.

Historically, communication has evolved from primitive forms, such as gestures and basic sounds used by hominids around 3 million years ago, to the emergence of structured language and later, writing, approximately 5,000 years ago (Craig, 1999). Today, the development of digital technologies has redefined modes of interaction, consolidating the Internet and social media as key spaces for knowledge dissemination and the formation of public discourse.

Within the digital sphere, languages play a crucial role in the production and circulation of content. Spanish is the third most used language on the Internet, after English and Chinese. Between 2000 and 2020, its online presence grew by 1,511%, surpassing the 743% increase recorded for English (Cervantes, 2021). In the case of Costa Rica, Spanish is the predominant language in digital communication, widely used on platforms such as X and YouTube to discuss topics of national interest.

This study analyzes the impact of Costa Rican Spanish in the digital environment, with a special focus on X and YouTube, investigating the level of approval of President

Rodrigo Chaves and the Executive Branch, based on news and communication videos related to the Government and the presidential figure. Through the study of interactions, trends, and sentiment analysis on these platforms, the research seeks to understand how users construct and express their perception of government performance within the Costa Rican digital ecosystem.

This research explores the following questions:

- What level of approval or disapproval toward President Rodrigo Chaves and the Executive Branch is reflected in news from national media on X?
- How does the sociolinguistic load of Costa Rican expressions—such as slang, sarcasm, and nicknames—influence sentiment classification in digital content, particularly in replies and YouTube comments?
- To what extent do emojis used on X and YouTube reinforce or alter the emotional perception of messages related to government performance?
- To what extent does the predominant neutrality in sentiment analysis represent a true absence of emotional bias, or is it a result of limitations in sentiment analysis models when facing the particularities of Costa Rican Spanish?
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III. CONCEPTUAL FRAMEWORK

A. Costa Rican colloquialism

Costa Rica exhibits notable linguistic diversity. In addition to indigenous languages (such as *'Bribri'* and *'Cabécar'*), English is widely spoken in tourist areas and within Afro-descendant communities along the Caribbean coast (Araya, 2012).

According to Delgado (2014), the lexicon of Costa Rican Spanish can be considered a dynamic and evolving phenomenon, influenced by the existential experiences of its speakers. In this sense, every significant shift in experience, whether collective as a country or individual, has the potential to drive continuous transformation in the lexicon. This perspective reinforces the idea that language is not a static system, but rather one that actively responds to the needs and lived experiences of the community, adapting to new social, cultural, and environmental realities.

Following this interpretative approach, existing linguistic variations are considered to arise from multiple factors, where not only accent but also the variety of meanings a word can carry across different countries serves as a differentiator.

The creation of new terms based on the lived reality of a population within its territory, and the evolution of those terms, can be said to shape a country's language in broad strokes (Lagos, 2020). The term used to describe this phenomenon is known as a neologism.

The term Costa Rican colloquialisms is defined by the Royal Spanish Academy (RAE, n.d.) as "a word or usage particular to the Spanish spoken in Costa Rica" (definition 3), acknowledging that the country has a unique way of speaking the language, one that includes terms not even recognized by the regulatory academy in its official documentation.

B. Natural Language Processing (NLP)

The study of language extends beyond sociolinguistic boundaries and into technological domains, such as Natural Language Processing (NLP). NLP is an interdisciplinary field that combines computational linguistics, artificial intelligence, and machine learning, aiming to develop systems capable of understanding, interpreting, and generating human language in a variety of contexts and applications.

NLP focuses on transforming unstructured language data into structured representations, enabling the analysis of large volumes of text using statistical modeling techniques and deep neural networks (Khurana, Koli, Khatter & Singh, 2023; Patwardhan, Marrone & Sansone, 2023).

Its applications have expanded significantly in recent years through the development of advanced models such as transformers, which capture complex semantic and syntactic patterns in large datasets. These models have demonstrated remarkable performance in NLP tasks, with near-human accuracy in specific contexts, achieving substantial progress in areas such as human-computer interaction and automated content analysis (Supriyono, Wibawa, Suyono & Kurniawan, 2024).

Among the most prominent applications of NLP are text classification, machine translation, sentiment analysis, question answering, and text generation.

C. Sentiment analysis

Sentiment analysis plays a fundamental role in this research, as it allows for the identification, extraction, and classification of emotions and opinions in textual data, with the goal of understanding the attitudes and perceptions expressed in written language. The study by Hu, Rui, Zeng, Chen, & Fan, (2018) suggests that before the year 2000, research in this field was limited, but it later became a popular area, achieving significant advances.

Based on text classification algorithms and machine learning, sentiment analysis categorizes text fragments according to their polarity—such as positive, negative, or neutral—providing quantitative information about the emotions contained in large volumes of data (Guo, 2022). In this context, sentiment may refer to a judgment, mood, or the evaluation made by the human author.

Consequently, sentiment analysis focuses on studying the emotional state of subjective data by systematically identifying, extracting, and quantifying emotions. This classification is based on three levels: document, sentence, and aspect. At the document level, the goal is to determine whether the overall emotion conveyed by the text is favorable, unfavorable, or neutral. At the sentence level, the analysis focuses on each individual sentence. Finally, at the aspect level, the aim is to identify the sentiment associated with a specific feature or entity within the text (Raghunathan & Saravanakumar, 2023).

1) Applications: in terms of sentiment analysis applications, particular relevance is given to the monitoring of public opinion on social media, the analysis of product and service reviews, and the interpretation of comments on customer service platforms. These uses enable organizations to detect patterns of user satisfaction or dissatisfaction in real time (Aftab, Ullah, Marjan, Baloch, Aslam, Amphawan & Neo, 2023). In the business context, these capabilities are valuable for strategic decision-making based on customer perception and competitive analysis, while in the political sphere, they allow the measurement of reactions to events or policies based on the content and tone of online discussions (Taherdoost & Madanchian, 2024).

According to Khalil, El Houby, & Mohamed (2021) social media has become one of the most relevant sources for analyzing opinions and emotions, thanks to the enormous volume of comments published on these platforms. Millions of users share content constantly and fluidly, creating a dynamic and ongoing exchange of information.

They indicate that by 2022, more than 90% of internet users accessed social media each month, and the percentage of social media users reached 75% of the global population. As stated by Merayo, Vegas, Llamas, & Fernández (2023), there were 17 social media platforms with over 300 million active users as of January 2022. Facebook led the ranking with more than 2.91 billion monthly active users, followed by YouTube with 2.562 billion.

In the case of social network X, it is a microblogging platform that allows a maximum of 280 characters per post, and it is recognized as one of the most prominent social networks. It has 330 million monthly active users and stands out as a key space for sharing opinions and perspectives on current issues. Unlike other platforms, X does not have local groups, which allows any user to publish and access content freely (Arun & Srinagesh, 2020).

As a result, social media has become a significant representation of social sentiment—not only through the opinions expressed and recorded on these platforms but also through the emotional impact they generate in their audiences (Kumar & Jaiswal, 2020).

2) Social media in sentiment analysis: the growing volume of easily retrievable information from social media, its diverse content formats, and the complexity of modeling sociological and psychological attributes associated with sentiment have led to the use of machine learning as one of the most effective tools for this type of analysis (Suhaimin, Ahmad, Moung, Nohuddin, Chua & Coenen, 2023).

Sentiment analysis is widely implemented in the political arena. For example, studies on sentiment analysis of tweets from the year 2016 were conducted to evaluate the polarity of opinions toward Donald Trump. Similarly, this approach was used to detect bias in Western media coverage of conflicts such as the Israeli Palestinian situation, the nuclear agreement between Iran and the United States, the U.S.–China trade war, and the Syrian refugee crisis (Rendon-Cardonam, Gil-González, Páez-Valdez & Rivera-Henao, 2022).

X has been studied more extensively than other social networks due to certain characteristics, such as its high population penetration, its function as a repository of user opinions, and the wide variety of topics and specific interests addressed on the platform (Passi & Motisariya, 2022).

The language used through information and communication technologies (ICTs) encompasses not only written text but also audio and images, which are commonly present in conversations occurring across various social media platforms. These interactions are characterized by their brevity and the incorporation of emojis. Emojis are images used to represent gestures, emotions, and feelings. Additionally, the previously vertical and unidirectional communication model has evolved into a horizontal and multidirectional one, where users act as both consumers and producers of information, actively participating in forums, blogs, and social networks (Dang, Moreno-García, & De la Prieta, 2020).

3) Emojis in communication: advancements in digital technology have transformed the way we communicate and interact. Digital interactions, particularly those based on text, primarily consist of verbal exchanges with little or no opportunity to share nonverbal cues. Emojis, along with their predecessors, emoticons, were introduced to compensate for this issue. It is estimated that nearly half of all verbal messages shared on digital platforms include emojis, with those that

mimic facial expressions of emotions being the most popular (Manganari, 2021).

The use of emojis not only represents a milestone in modern communication but also marks the beginning of a new and still underexplored field of research on emotions at the technological level. In this area, the analysis extends beyond words to include images, given their widespread use on social media. This implies that, today, statistically understanding the use of emojis is essential to grasp how different users perceive and express sentiments across social platforms.

4) Challenges in sentiment analysis: Spanish is one of the most widely used languages on the Internet; however, the development of NLP techniques for this language has not followed the same growth trend. English remains the language with the largest volume of data, followed closely by Chinese and Spanish (Mohammed & Prasad, 2023). In this context, the main challenge lies in developing a polarity detection system that can be used interchangeably across the various dialects of Spanish (Palomino, 2018).

Although there are studies on sentiment analysis in Spanish within social networks, further research is needed due to the high complexity of detecting, handling, and processing specific linguistic features of Spanish, such as negation, sarcasm, and ambiguity—complexities that are even more pronounced in the context of social media (García-Díaz, Sanchez-Berriel, Pontiel-Martín, & Gonzalez-Ávila, 2023).

It becomes evident that intercultural communication is not always fully represented, as language technologies are advancing rapidly for only a minority of the world's languages. At the same time, most languages are falling behind (Joshi *et al.,* 2020). The primary reason for this imbalance can be attributed to disparities in social development between countries.

As we expand our technological advancements, it is essential to adapt these technologies to a broader variety of languages and cultures. This, in turn, would contribute to the inclusion of a greater number of people. Such a perspective not only promotes global equity but also fosters diversity in the field of technological development.

The conceptual framework presented highlights the importance of understanding the linguistic particularities of Spanish, as well as the inherent challenges in applying NLP techniques within specific sociocultural contexts. The dynamic nature of language, the role of social media as repositories of public opinion, the use of emojis as emotional components of digital discourse, and the technological limitations affecting languages other than English create a complex environment for sentiment analysis. In this context, the need to adapt analytical methodologies to local linguistic realities is justified to achieve a more accurate interpretation of social perception on digital platforms—an essential objective guiding the development of this research.

In summary, this conceptual framework articulates three fundamental dimensions: the linguistic particularities of Costa Rican Spanish, the capabilities and limitations of NLP, and the role of social media as an emotional mirror of public opinion. The combination of local slang, the extended use of emojis, implicit sarcasm, and technological limitations regarding Spanish as a language pose a constraint to sentiment analysis.

These factors not only underscore the necessity of adapting analytical models to the Costa Rican sociocultural context but also justify the development of hybrid approaches capable of more sensitively capturing the real perceptions expressed on digital platforms such as X and YouTube. The following section outlines the methodology used and the limitations encountered in data collection and analysis from X and YouTube during the period from July 2024 to January 2025. Subsequently, the main findings and an interpretative analysis of the public perception of President Rodrigo Chaves and the Executive Branch are presented. Finally, the study's conclusions and recommendations for future research are discussed.

IV. METHODOLOGICAL FRAMEWORK

This research is based on the extraction, processing, and storage of data obtained from the social media platforms X and YouTube. A continuous data collection strategy has been established, which will be explained in detail later. This strategy allows for the ongoing monitoring of digital activity associated with official and relevant sources within the context of analysis to measure public perception of the Government and the President of Costa Rica.

The study covers data collection during the following periods, based on the research start date in July 2024 and the first results cutoff:

- News from X: July 3, 2024, to January 31, 2025
- Replies from X: July 13, 2024, to January 31, 2025
- YouTube comments: July 1, 2024, to January 31, 2025

The methodology is detailed below:

A. X (Twitter)

Data from X was obtained through scheduled requests to X API v2, using a developer account created for Universidad CENFOTEC. The X accounts considered in this study for news collection correspond to official media outlets in Costa Rica and the official account of the presidency:

- @presidenciacr (official account of the Presidency of Costa Rica)
- @delfinocrc
- @SemanarioU
- @elmundocr
- @nacion
- @La_Republica
- @elfinancierocr

Data collection on X was conducted through convenience sampling, selecting verified accounts from official media and the Presidency of the Republic of Costa Rica.

This selection was based on criteria of relevance and influence on national public opinion, considering their informational reach and central role in the dissemination of government-related news. The sampling method was not based on statistical significance, but rather on the practical representativeness of the main digital media outlets in Costa Rica on the X platform, aiming to include various editorial perspectives.

Among the selected media outlets, differences in ideological and editorial approaches were identified; however, no explicit bias classification was performed, as the objective of the analysis was to capture the diversity of discourse, regardless of political orientation.

For the collection of replies[1], the retrieved news items from the sources mentioned above were reviewed, and a filter was applied to identify those related to the Executive Branch or the Presidency of Costa Rica using the following keywords:

- Government (*'Gobierno'*)
- President of the Republic (*'Presidente de la República'*)
- President Chaves (*'Presidente Chaves'*)
- Rodrigo Chaves
- Law Project (*'Proyecto de Ley'*)
- Legislative Assembly (*'Asamblea Legislativa'*)
- National Broadcast (*'Cadena Nacional'*)
- Ministers/Ministries (*'Ministerios/Ministros'*)

1) Collection Frequency: the data collection for news-related tweets from the described accounts and replies concerning news about the Government of Costa Rica is carried out at five-day collection intervals. The data—for both news tweets and replies—is stored in a structured CSV file, where each new extraction is appended to the previous records.

2) Metadata: the metadata for the download of news from the X accounts is shown in Table 1 (See Appendices). The id is used to download replies to tweets that contain content related to presidential and governmental news in Costa Rica. The id and author_id fields serve as primary keys to link with the replies to the database. The metadata for replies related to government news is described in Table 2 (See Appendices).

B. YouTube:

Data collection on YouTube was conducted through YouTube Data API v3. For this research, the official channel of the Presidency of the Republic (user @PresidenciadelaRepublicaCr) on YouTube was used, and comments were downloaded from the following types of videos:

- National Broadcast (*'Cadena Nacional'*): videos covering various nationally relevant topics on a weekly basis, such as proposed legislative projects, significant news, press conferences, among others.
- Live*('En Vivo'*): live-streamed videos including Q&A sessions from press conferences, the Learn More (*'Infórmate Más'*) news segment, and similar content.

1) Collection frequency: data collection for videos published on the official YouTube channel of the Presidency of Costa Rica was conducted on a biweekly basis. This collection interval was defined because the YouTube API allows access to videos from any date without immediate time restrictions. Each execution of the data collection process retrieves videos published in the last 15 days and stores the information in a structured CSV file. With each new collection cycle, the data is appended to the previous records, ensuring a complete history of published content.

2) Metadata: the metadata for the collection of videos from the YouTube channel of the Presidency of the Republic includes a master dataset and per-video files containing the corresponding comments, as detailed in Table 3. The field ID_VIDEO serves as the unique identifier and primary key for retrieving the video information and associated comments. The metadata for the information collected per video is presented in Table 4 (See Appendices).

[1] It is important to note that keyword filters were applied, along with a manual review, to identify government-related news based on specific topics—for example, news referencing the '*Ley Jaguar'* or the '*Caso Barrenador'* involving the Social Security Institution '*Caja Costarricense del Seguro Social'* (CCSS). This review was carried out with the purpose of collecting all replies to news articles relevant to government-related issues.

C. *Data processing*:

For the processing of news, replies, and comments from the X and YouTube platforms, a Python script was used to perform the analysis, incorporating NLP techniques. The libraries used in this research include:

- ***numpy***
- ***pandas***
- ***spacy***
- ***emoji***
- ***unidecode***
- ***re***
- ***nltk***
- ***gensim***
- ***Counter***
- ***LdaModel***
- ***stopwords***
- ***word_tokenize***
- ***seaborn***
- ***matplotlib.pyplot***
- ***plotly.express***
- ***plotly.graph_objects***
- ***pyLDAvis***
- ***SentimentIntensityAnalyzer***

The applied methodology consists of three stages: text preprocessing, sentiment analysis, and results visualization, detailed as follows:

1) Text preprocessing: preprocessing is a crucial step for cleaning and structuring the textual data obtained from X and YouTube. The following transformations were implemented:

- **Removal of special characters and normalization:** non-alphanumeric characters and extra white spaces were removed, and the text was converted to lowercase.
- **Handling of emojis and accented characters:** the emoji library was used to convert emojis to their textual equivalent, and unidecode was applied to remove accents from words.
- **Tokenization and stopword removal:** word_tokenize from the NLTK library was used to split the text into individual words, and Spanish stopwords were removed.
- **Lemmatization:** spaCy was used to reduce words to their base form.
- **Noun extraction:** carried out to validate the most relevant topics while excluding nouns from consideration.

2) Sentiment analysis: to classify sentiment in news content, replies on X, and YouTube comments, the VADER model (Valence Aware Dictionary and Sentiment Reasoner) from Python's NLTK library was employed. The analysis was based on the SentimentIntensityAnalyzer() function, which assigns a compound sentiment score to each comment, defined within the following ranges:

- Positive: compound score > 0.1
- Neutral: -0.1 ≤ compound score ≤ 0.1
- Negative: compound score < -0.1

Additionally, a custom dictionary of words and phrases symbolizing positive or negative connotation in the analyzed comments was created. These dictionaries were built through a systematic manual review of compiled reply and comment files from the X and YouTube platforms, focusing on identifying expressions relevant to the Costa Rican political context.

The following criteria were used for including terms in the dictionaries:

- Frequency of appearance of the word or phrase in interactions referring to President Rodrigo Chaves or the Executive Branch.
- Explicit emotional charge (positive or negative) associated with the term in discourse.
- Recognition of local expressions (slang), nicknames, sarcasm, or emotional tone typical of Costa Rican Spanish.
- Evaluation of usage context to exclude ambiguous or neutral terms.

The objective of constructing these custom dictionaries was to improve the accuracy of sentiment analysis by adapting it to the linguistic patterns specific to digital communication in Costa Rica, which are not fully captured by traditional sentiment libraries trained in other Spanish dialects. The results of this categorization are detailed in Table 5.

For topic analysis in YouTube comments and in the case of news and replies on X, the Latent Dirichlet Allocation (LDA) method from the gensim library was used to group comments into predominant discussion topics.

D. *Limitations*

The limitations of the present study are detailed below[2]:

- X API's HTTP GET method allows retrieval of tweets from a maximum of the past five days; therefore, the recovery of historical tweets is not possible.
- The maximum number of replies that can be downloaded per original tweet is limited to 100 comments.
- The monthly data download capacity via the X API is limited to a total of 10,000 posts per month, including

[2] A clear example of this limitation is the case of the parrot emoji (🦜), which represents the parrot animal. Based on validation, it is used in conjunction with words such as '*narcotráfico*' (drug trafficking), '*drogas'* (drugs), and '*narcogobierno'* (narco-government). Therefore, its interpretation is linked to the drug cocaine, which is popularly referred to as *'perico'*.

tweets and replies from accounts such as 'delfinocrc', 'SemanarioU', 'nacion', among others.

- For sentiment analysis, libraries trained in English or Spanish (Spain, Mexico, Argentina) were used to generate sentiment scores, which presented limitations in capturing sarcastic expressions, Costa Rican idioms, or culturally specific ways of expressing positive or negative emotions in Costa Rican Spanish.
- At the level of sentiment analysis execution, a limitation was identified in weighing the use of emojis with either a positive or negative connotation based on the context of the news.

Although methodological limitations were identified regarding data collection through the X API, partial coverage of replies, volume restrictions, and the linguistic particularities of sentiment analysis, these conditions do not compromise the validity of the results or the overall value of the present research. The adopted data collection strategy enabled the construction of a sufficiently robust corpus to observe relevant trends during the analysis period. Moreover, the contextual interpretation of the data helped to compensate for the limitations inherent in natural language processing models not tailored to Costa Rican Spanish. Consequently, the recognized limitations should be considered when interpreting the findings on the perception of President Rodrigo Chaves and the Executive Branch in the Costa Rican digital environment.

V. DISCUSSION

This section presents the results of the research:

A. X News:

1) *Topics in X news:* the analysis of X news from the accounts of 'delfinocrc', 'SemanarioU', 'elmundocr', 'nacion', 'La_Republica', 'presidenciacr', and 'elfinancierocr' was based on the identification of the most relevant topics throughout the study, with the goal of identifying the most frequent themes reported by official media outlets on the X platform. Figure 1 presents the results of the LDA model for news items:

Based on Figure 1, the words and their corresponding relevance (represented by the weight on the Y-axis) are identified within the five topics for the case of X news. A significant emphasis was found on words such as president, Costa Rica, elections, power, law, country, and government (*'presidente', 'Costa Rica', 'elecciones', 'poder', 'ley', 'país',* and *'gobierno')*, which suggests that a large portion of the communication and news agenda is focused on governmental and political matters. According to the topics described, the news also shows relationships with themes related to quality of life and national conditions, through words like years, people and life (*'años', 'personas',* and *'vida')*. Additionally, there is notable relevance of terms such *as* country and minister (*'país', 'ministro'* and *'ministra*'), indicating a high volume of news referring to government performance.

2) X news with the highest number of replies: the analysis of the most interacted news items on the X platform revealed a clear trend highlighting the prominence of Rodrigo Chaves in the tweets with the highest number of replies, based on the results shown in Table 6 (See Appendices). The posts that generated the most responses revolved around his government decisions, the security crisis, controversial statements, and criticism of his administration, demonstrating that his figure concentrates debate and opinion expression on this social network.

It is important to note that due to the limitation of the X API (see Section 3.4 Limitations), the maximum capacity for collecting replies is limited to 100 per news item.

One of the main themes of these interactions is the coverage of his actions and decisions, notably the news about the delivery of scanners, in which President Chaves lashed out against the General Comptroller's Office of the Republic, the press, the deputies, and the Judicial Branch[3]. This news item generated a high volume of replies, confirming that confrontations between the president and other institutions may translate into a higher level of online discussion. Similarly, the announcement of political asylum for Venezuelan figures triggered a broad conversation about Costa Rica's role in the regional context.

The topic of security also emerged as a catalyst for reactions. News referring to the country's security crisis—contrasted with the lack of legislative approval for related bills—ranked among the most commented[4]. Added to this were publications on raids at the CCSS and criticisms of government corruption, suggesting that security and transparency are key points of interest for the audience.

Additionally, President Chaves' communication style and use of colloquial expressions during press conferences have played a significant role in the discussions on X. His direct and provocative statements generate strong reactions on social

[3] #Country. During scanner handover event, Chaves lashes out at the Comptroller's Office, the press, lawmakers, and the Judicial Branch https://t.co/EgSMeewCZd (Semanario Universidad, 2024)

[4]Navas: Raids at the CCSS force us to assess the level of corruption in this government https://t.co/1UmGRQ0RMk (El Mundo, 2024)

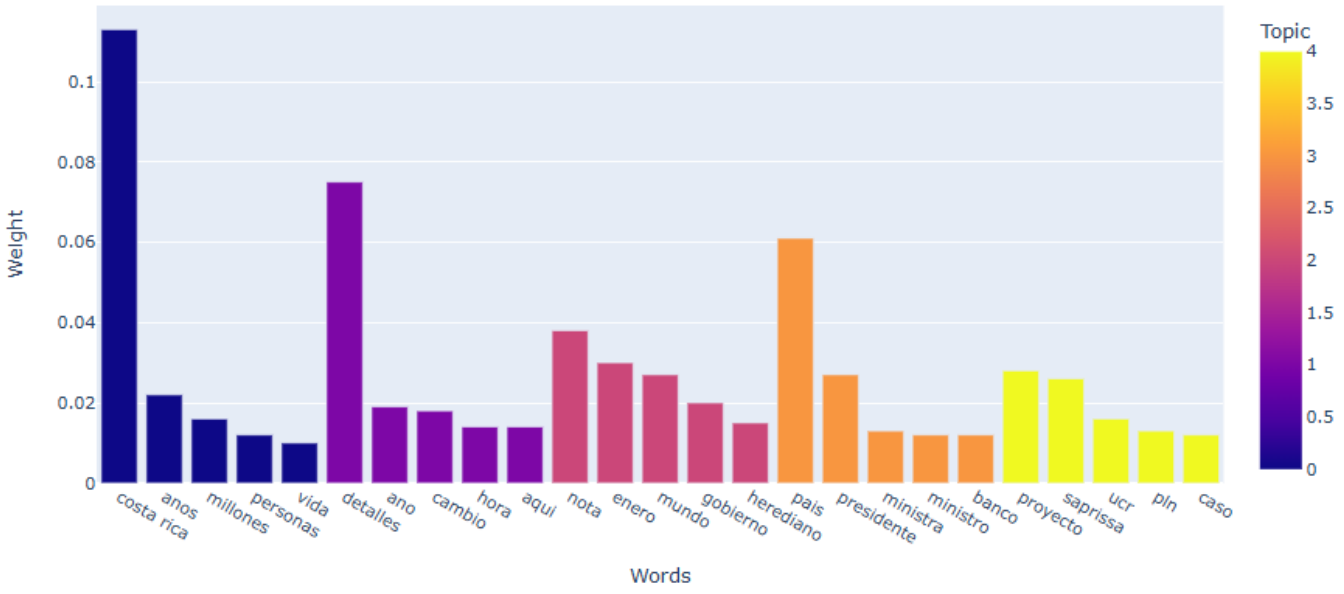

Figure 1. *Distribution of keywords by topic in X news.*

media—for instance, when he referred to a congresswoman by questioning whether she was lazy, stupid, or a liar; when he claimed that if he had to jump into a lake and swim with crocodiles, he would; or when he made homophobic remarks comparing legislators to the *'la loca de Gandoca'*. All these statements have substantially contributed to the polarization observed in the comments. Criticism of his administration, both from opposition figures and analysts, proved to be among the most replied-to news items during the study period.

In this regard, statements such as those by Acuña[5], who denounced a stench of homophobia in his speeches, or Ottón Solís[6] , who described him as a voice of anger, resonated strongly with an audience that responded massively. Even survey data—such as a nine-point drop in his credibility[7]—and news criticizing the government's performance and its aggressive character have triggered reactions that reveal an increasingly intense debate over his public image and leadership.

The analysis of the most replied-to news on X shows that *'El Mundo'* is the media outlet with the highest level of interaction on the platform. Its coverage includes high-impact topics such as statements by Rodrigo Chaves, criticism of his administration, and political and social events that trigger massive reactions. This pattern suggests that the X audience more frequently engages with posts from this outlet, whether to support or criticize its coverage, positioning *'El Mundo'* as a key player in the political discourse on social media.

3) Sentiment analysis: for the sentiment analysis of all news collected on X, filtered by keywords related to the presidency, government, law bills, and ministries, results reflect a tendency toward neutrally written content. 82.04% of the tweets analyzed were classified as neutral, indicating that the majority of posts are presented in an informative or descriptive tone, with no strong emotional charge. This suggests that, although the content covers politically relevant issues, the prevailing discourse on X tends to be more objective and report-based, avoiding explicit positive or negative evaluations. Figure 2 illustrates the evolution of sentiment analysis from July 2024 to January 2025.

These results, which show a trend toward neutral writing, align with the study by Gadek & Guélorget (2020), which indicates that legitimate news outlets exhibit a clear tendency toward a more factual and structured writing style. This distinguishes them from sensationalist or alternative media, which often use highly emotional or polarizing language, with the goal of maintaining public trust.

On the other hand, 12.51% of the tweets were identified as negative, reflecting the presence of posts with a critical

[5] Acuña criticizes Chaves' whiff of homophobia for comparing Ariel Robles to '*La Loca de Gandoca'* https://t.co/dkcNn6CBW5 (El Mundo, 2024)

[6] Ottón Solís describes Rodrigo Chaves as the spokesperson of anger https://t.co/0582udC72s (El Mundo, 2024)

[7] Rodrigo Chaves' credibility drops by 9 points in poll https://t.co/gvUEwzv121 (La Nación, 2024)

emotional charge. Given the filtering approach used, these tweets may relate to criticism of the government's performance, with headlines such as:

- Chaves refuses to provide invoices for event held at estate linked to businessperson: 'I don't have time to deal with stupidity.' Details at: https://t.co/ZRkle0gRqM
- CR Óscar Izquierdo criticizes Rodrigo Chaves for inciting violence if the Jaguar Law does not pass. #Politics https://t.co/rrinklQ9dP
- Chaves calls lawmakers' refusal to vote on Jaguar Law 2.0 quackery, hypocrisy, and political showmanship https://t.co/1XoX4sIcT8
- Chaves, you bastard, you're an abuser, you've left us without rights, healthcare, or education – these are the chants of university students at the start of the march at UCR. https://t.co/B2eFViiNU4

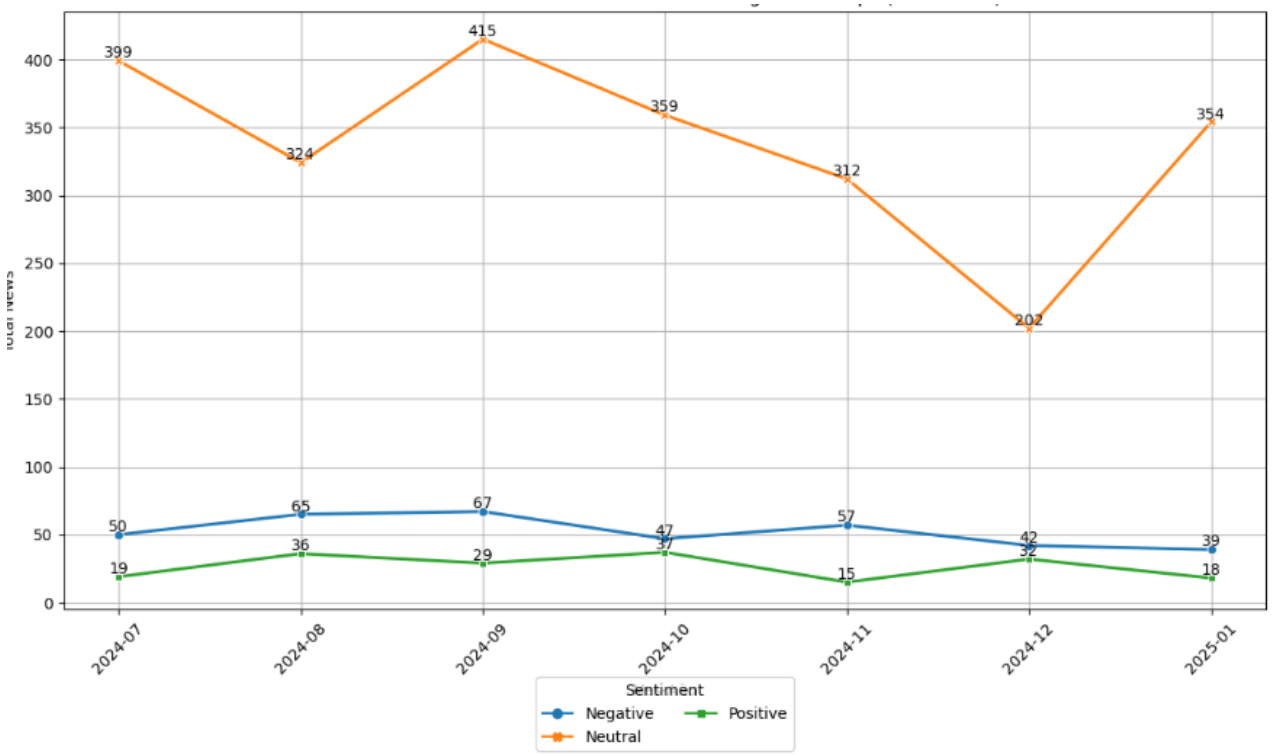

Figure 2. Evolution of sentiment analysis during the period from July 2024 to January 2025.

- Rodrigo Chaves: God forbid the time comes when we have to act as a society https://t.co/ZAHMoLAswJ

This segment of the news suggests that a portion of the conversation on X is oriented toward expressing discontent or disagreement with government decisions and actions.

Finally, 5.45% of the news on X was classified as positive, reflecting a lower presence of supportive content compared to criticism and neutral publications. This indicates that, while there are expressions of support for the administration and its initiatives, they carry less weight than informative or critical discourse. Some examples of news categorized as positive are included for reference[8].

- [8]The government has reported a primary surplus over the past three years, which has provided economic and fiscal solvency. #StrongEconomy #CostaRicaProgresses El gobierno reportó un superávit primario en los últimos tres años, lo que le ha brindado solvencia económica y fiscal. #EconomíaSólida #CostaRicaAvanza https://t.co/yaOQzpwf2v'
- **OPINION**: Give Caesar what is Caesar's — The president has fulfilled his duty during times of emergency. https://t.co/BYSQyW8g52
- Conacoop expresses support for the Jaguar Law bill https://t.co/aGUEq17ZMY

B. Creation of dictionaries of positive and negative words and phrases

This segment of the news suggests that part of the conversation on X is oriented toward expressing discontent or disagreement with government decisions and actions. Table 7 (See Appendices) presents replies from X that were initially classified as neutral but, through a manual review process, were associated with a negative sentiment. As part of the comment review findings, in the case of the replies on X, the use of nicknames and compound words was identified as a way to make negative references to the figure of the president, for example: '*chavelo', 'chavestia', 'zoodri', 'zoodrigo', 'narcopresidente'*, among others. These nicknames imply the use of sarcasm and mocking expressions, which are associated with disapproval and a lack of respect toward the president[9].

In this study, nicknames such as narco-president y narco-government ('*narcopresidente', 'narcogobierno',* and *'narcodrigo'*) are linked to news related to the country's security crisis and drug trafficking issues. Meanwhile, nicknames like '*zoodri', 'zoodrigo'*, and '*zoofílico*' refer to the scandal involving the president and accusations of sexual harassment and alleged orgies with animals at the World Bank (Semanario Universidad, 2021; El Observador, 2021).

Lastly, compound derogatory terms such as *'chavelo' 'chabestia' 'chaveslandia', 'chavejetas*', among others, were identified as derogatory words associated with mockery and disapproval. As shown in Table 5 (See Appendices), it is important to highlight these words with a negative weighting in the sentiment analysis code, as they represent highly specific sarcastic expressions from the political context and reflect a negative sentiment toward the presidential figure.

On the other hand, Table 8 (See Appendices) presents YouTube comments initially classified as neutral, which were later associated with a positive sentiment through manual review. Notably, in identifying positive connotation words or phrases—specifically on the YouTube platform—there was a clear trend toward the use of religious expressions such as Gloss bless you, blessings or thank God ('*Dios te bendiga', 'bendiciones',* and *'gracias a Dios')* in comments expressing support for the Government and the President of Costa Rica.

Additionally, the analysis of YouTube comments revealed the use of formal address when referring to the president, including expressions like his full name, *'Don Rodrigo Chaves'*, or '*Presidente Rodrigo Chaves'*. This usage was particularly notable as a form of expressing admiration and respect in positively connoted comments. This is consistent with Bermejo (2008), who explains that honor encompasses both internal perception and the external dimension projected through social reputation and recognition. Institutional recognition through honorific distinctions, titles, and protocol treatments—such as Sir, His Excellency or Honorable ('*Don', 'Excelentísimo',* or *'Ilustrísimo')*—functions as mechanisms of honor promotion, reinforcing the image of authority, prestige, and merit. In the public sphere, the use of such forms of address not only conveys a differentiated status but also reflects admiration and respect toward the distinguished figure[10].

C. Perception of the Government Based on X replies

1) *Topics in the 'Replies':* the topic analysis of replies to news about the government and presidency of Costa Rica (See Figure 3) revealed the central themes of debate on social networks, identifying five recurring topics that encapsulate digital discourse around public administration and its key actors.

[9] This premise aligns with the study by Kidron & Ish-Shalom (2024), which suggests that the use of nicknames in the political arena constitutes a deliberate strategy that transcends mere informality of language. Consequently, it becomes a carefully employed rhetorical device intended to ridicule and delegitimize opposition figures. Sarcasm and mockery function as tools of attack aimed at discrediting and reinforcing the erosion of the target's credibility, which is associated with a negative valuation.
According to Nikolenko (2023), nicknames operate as emotive linguistic units capable of conveying both positive and negative emotions, thus influencing public perception of a given figure. In the political context, it is highlighted that nicknames carry a specific emotional charge used to shape a leader's reputation, either by elevating or discrediting them. The article cites concrete examples of pejorative nicknames assigned to political leaders, such as 'Tricky Dick' for Richard Nixon following the Watergate scandal, and 'Crooked Hillary' for Hillary Clinton during the campaign and 'Trumpenstein' for Donald Trump, highlighting his manipulative character and controversial political actions.

[10] This finding aligns with León, Albán & Quinteros (2018), who point out that religious expressions in everyday language reflect the intangible heritage of Christian culture and serve an essential function in communicating positive emotions and gratitude. According to Hernández (2020), religion has deeply influenced the Spanish lexicon, giving rise to interjections, proverbs, and idiomatic expressions that, although some may have lost their sacred meaning, retain their expressive power and social function. The use of religious idioms such as 'a blessing from God' or 'may God reward you' allows for the condensation of strong emotional content into brief phrases, emphasizing feelings of gratitude and appreciation. These expressions not only reflect the historical influence of Christianity in Hispanic societies but also help strengthen community bonds and convey positive values in everyday communication (Macías, 2020).

The first group of terms showed a high concentration of mentions related to the presidential figure, with highlighted words such as president, people, Costa Rica, elections and sir (*'presidente', 'gente', 'Costa Rica', 'elecciones',* and *'señor')*. The presence of these terms suggests that Executive leadership and public perception of governance are central topics in public conversation.

The second group involves the exercise of political power and government administration, where key words such as power, law, political party, state and narco party (*'poder', 'ley', 'partido', 'estado'* and *'narco')* reflect debates about law enforcement and political projects. The mention of '*narco*' highlights concerns over the security crisis in the country and the impact of drug trafficking on public administration. This finding suggests that citizen security is a recurring theme in digital conversations, eliciting diverse positions on the effectiveness of government policies in this area.

In the third topic, the role of legislators takes precedence, with terms such as campaign, deputy and country *('campaña', 'diputado', 'diputada',* and *'país)'*, relating to government management and political campaigning. The presence of the term embarrassment ('*vergüenza*') suggests a critical opinion about legislative performance, potentially indicating dissatisfaction with the work of the Legislative Assembly.

The fourth topic highlights the name of President Chaves, accompanied by terms such as years, government, luxury and retirement pension (*'años', 'gobierno', 'lujo'*, and *'pensiones'*). This indicates that his figure remains central to the conversation on X, with a particular emphasis on the issue of luxury pensions.

Finally, the fifth topic reflects more emotional language and widespread discontent, with terms such as shit, guy, part, and form *('mierda', 'tipo', 'parte',* and *'forma*') suggesting responses charged with frustration or rejection toward certain political events, implemented policies, or public figures.

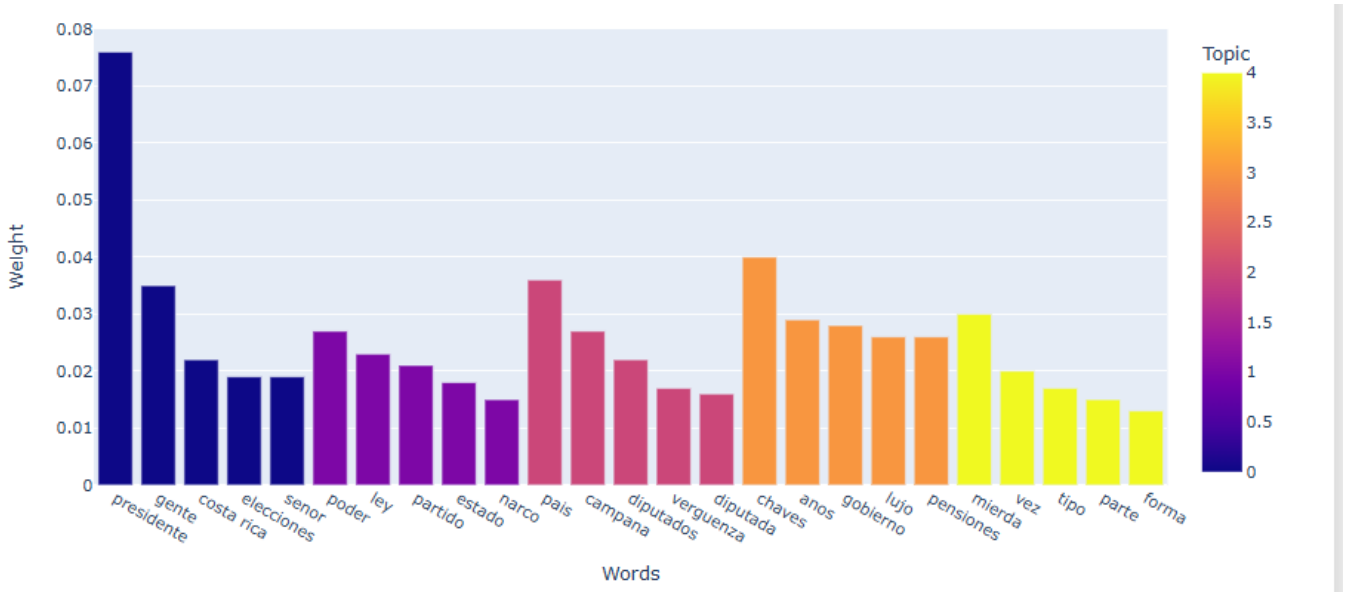

Figure 3. *Topics in X replies.*

2) Emoji Analysis: the most frequently used emojis in the replies are shown in Table 9 (See Appendices). Based on the frequency results of the emojis, manual validation was conducted to analyze the textual context and determine the intended purpose of each emoji to assign an associated sentiment. According to the findings, 14.67% of comments on X contain at least one emoji, while the remaining 85.33% do not use these visual symbols. This reinforces the idea that although not all users include emojis in their posts, their presence in more than one in ten comments represents a relevant expressive resource worthy of analysis.

This complements previous findings by showing that, beyond their semantic diversity, emojis appear frequently enough to significantly influence the overall tone of discourse. The emoji 🤣 shows the highest frequency, accounting for 20.88% of usage, followed by 😂 at 10.43%, indicating a strong tendency toward sarcasm and mockery as predominant forms of interaction. Together, these two emojis account for more than 30% of total usage, consolidating a clear trend of irony in comments targeting public figures or political decisions.

Conversely, the CR emoji, with 5.68%, carries a nationalist symbolic charge used in contexts of support or identification with the presidential figure or patriotic discourse. A significant share of emojis with negative connotations was also observed, such as 💩, 🤮, and 🤢, which together represent over 10% of total usage and are commonly associated with expressions of rejection, disgust, or disapproval. The 🤡 emoji also appeared prominently (4.28%) and reinforces this trend, often being used in contexts of ridicule or discredit.

At the same time, emojis reflecting moderate support or celebration, such as 👏 in various skin tones and ❤️, were identified, although their use was less dominant. This distribution underscores the need to explicitly incorporate emojis as variables in sentiment analysis due to their contextual semantic value and key role in the emotional interpretation of messages.

As shown in Table 10 (see Annexes), it was concluded that emojis allow for the expression of emotions or attitudes depending on the context in which they are used[11].

D. Perception of the Government based on YouTube comments

1) Topics in the Comments: the main topics found in the comments on the YouTube platform are detailed in Figure 4. The analysis of predominant topics in YouTube comments reveals a conversation marked by a generally positive evaluation of government performance, support for the presidential figure, and the use of religious expressions as a form of recognition. Among the recurring themes, there is a consistent reference to the work and performance of ministers,

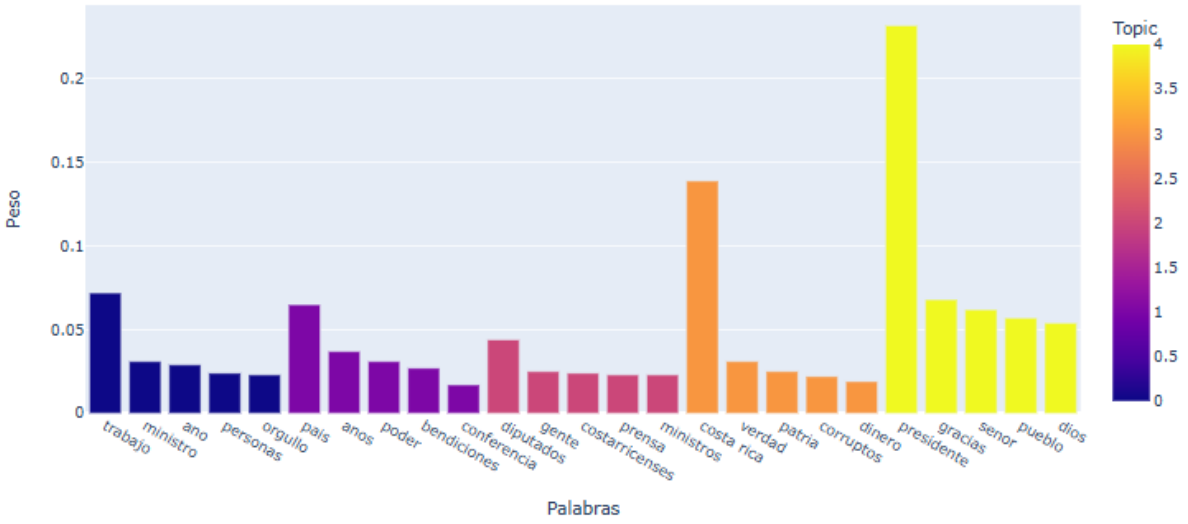

Figure 4. *Topics in YouTube comments.*

where words such as work, minister, and pride suggest a positive perception of public administration and cabinet leadership

The presence of the word pride indicates that a portion of the comments aim to highlight the government's achievements and their impact on citizens. Likewise, the use of terms such as country, years and power (*'país', 'años'* and *'poder'*) in combination with the word blessings (*'bendiciones'*) demonstrates a tendency to link governmental support with expressions of faith and gratitude. In this context, the recurrent mention of God reinforces that a significant number of positive comments incorporate religious references, consolidating a narrative in which presidential leadership is perceived as a blessing for the nation.

Moreover, patriotism and concerns about corruption emerge as recurring themes. The prominent mention of Costa Rica,

[11] For example, the following were identified:
- 🤣 y 😂: associated with expressions of sarcasm or mockery.
- CR: used in comments with a nationalistic tone or to express support.
- 💩, 🤮 and 🤢: conveying a sense of disgust or repulsion.
- 🤡: used in the context of clown as a slang term for ridicule.
- 🐀: rat emoji associated with the expression "thief."
- 👏, 👏🏻 and 👏🏼: expressions of congratulations or support.
- 🐆: reference to the Jaguar Law, often used with a tone of sarcasm or mockery.

along with terms such as homeland, corrupts and money (*'patria', 'corruptos'* and *'diner*o'), suggests that while some comments express national pride, others question the transparency of public administration. The combination of these terms indicates that, although there is support for the president's leadership, concerns persist regarding the management of public resources and corruption-related issues.

Finally, the most dominant topic revolves around the figure of the president, with frequent mentions of thanks, sir, people and God (*'gracias', 'señor', 'personas' and 'Dios'*) reinforcing a narrative of recognition and public endorsement. Consequently, YouTube comments reflect a discourse where presidential support intertwines with national pride and religious beliefs.

2) Emoji Analysis: the most frequently used emojis in YouTube comments are presented in Table 11 (see Annexes). As in the analysis conducted for the X platform, a manual validation of the comment context was carried out to determine the function and purpose of these symbols on social media. A sample of comments containing emojis is shown in Table 12 (See Appendices). In the specific context of comments on press conferences and other official events of President Rodrigo Chaves, a predominance of emojis with supportive and appreciative connotations was observed.

Based on the results obtained from YouTube, there is a higher presence of emojis compared to X: 27.16% of the comments contain at least one emoji, which is double the percentage reported on the other platform. This suggests that YouTube users more frequently resort to visual symbols to complement their opinions. The emoji 🇨🇷 showed the highest frequency, accounting for 19.03% of the total, reflecting a strong nationalist sentiment or patriotic support, possibly linked to the presidential figure or a discourse of collective identity[12]. It was followed by ❤️ at 11.29% and 👏 at 9.29%, both associated with emotional support, celebration, or recognition. In contrast to X, where sarcasm or irony prevails, YouTube exhibits a more positive or emotionally balanced tone.

Additionally, a variety of emojis associated with optimism, spirituality, and positive emotion stand out, such as 🙏, 🎉, 💪, and 💯, which together account for over 15% of occurrences. While some humorous symbols like 😂 and 🤣 appear, their frequency is significantly lower, suggesting a reduced presence of sarcasm on this platform. The presence of the 🐆 emoji, which represents the Jaguar Law, retains a political or identity-related connotation, although its interpretation varies depending on the context. Overall, the results indicate that comments on YouTube tend to convey emotional support and affective engagement, reinforcing the need to adapt sentiment analysis models to the specific platform and the behavior of its audience.

VI. CONCLUSIONS

Sentiment analysis of news collected on X regarding President Rodrigo Chaves and the Executive Branch for the period from July 2024 to January 2025 showed a marked tendency toward neutrality, with 82.04% of publications classified in this category. This suggests that the predominant discourse on the platform is centered on information, with little emotional charge. Of the tweets analyzed, 12.51% reflected a negative stance, with critical messages directed at government management and specific political decisions. In contrast, only 5.45% of the posts were classified as positive, indicating that expressions of support for the government and its initiatives had limited presence compared to critical and neutral content. Additionally, the importance of the period under study is highlighted, as cases such as the CCSS *'Barrenador'* scandal and the Jaguar Law received extensive coverage in digital media on X.

It was determined that slang, context, sarcasm, and Costa Rican expressions influence comment classification, highlighting the need to assign positive or negative sentiment based on implicit meaning. This is crucial for improving the accuracy of sentiment analysis and avoiding incorrect neutral classifications.

In the context of sentiment analysis and perception of the government, it was identified that understanding the social weight of words is essential, as language not only conveys information, but also shapes perceptions, reinforces ideologies, and affects the reputation of public figures. It was observed that the use of derogatory nicknames or honorific titles is not neutral; rather, it reflects intentions, values, and emotions that may influence public debate and the legitimacy of authorities.

The use of emojis was found to be a fundamental tool in digital communication, as it allows emotions and attitudes to be

[12] The emojis identified in YouTube were:
🇨🇷: a reference to nationalist support in messages related to press conferences.
❤️ and 💯: associated with expressions of appreciation and emphasis on the truthfulness of the messages.
• 👍, 🎉, 💪, 👏, 👏🏻, 👌, 🙌 and 👏🏽: represent congratulations and support for the presidential administration.
• 🐆: a direct reference to the Jaguar Law and the figure of Rodrigo Chaves, used both as a symbol of support and exaltation.
• 🙏: linked to comments containing religious references and blessings directed at the president and his cabinet.

expressed visually, directly, and contextually. Their inclusion on social media is not arbitrary but provides key information about the sentiment associated with a message, reinforcing or even altering its tone. On X, 14.67% of comments included at least one emoji, indicating more selective use, yet charged with irony, sarcasm, or disapproval, as evidenced by the high frequency of emojis such as 🤣, 😂, 💩, and 🤡. On the other hand, on YouTube, 27.16% of comments contained at least one emoji, showing more frequent usage and a predominantly positive emotional tone, with symbols like CR, ❤️, 👏, and 🙏. These figures clearly quantify visual participation in digital discourse and reinforce the need to consider emojis as key variables in sentiment analysis and in interpreting narratives on social platforms.

RECOMMENDATIONS

It is recommended to consider the incorporation of customized dictionaries that include terms, slang, and expressions specific to the Costa Rican context, as well as manual validation of the emotional load of emojis used on social media. This approach would enhance the accuracy of sentiment analysis related to government perception, avoiding incorrect neutrality classifications and more faithfully capturing the intention and tone of user comments. Additionally, integrating NLP models adapted to linguistic variations and the use of sarcasm will ensure a more effective interpretation of public discourse.

It is also recommended to consider other social media platforms such as Facebook and TikTok to reach broader population groups and obtain a more comprehensive view of public perception toward the government. Expanding the analysis to these platforms would allow for a more inclusive evaluation of public opinion, capturing perspectives from population segments that may not be as active on X or YouTube. Moreover, incorporating multiple platforms would improve the accuracy and representativeness of sentiment analysis, offering a more complete picture of governmental perception across different digital environments.

It would be desirable for both X and YouTube to provide demographic data about users, particularly the age range, in order to expand the scope of perception analysis. The use of such data would allow for comment segmentation and evaluation of how public opinion varies across different age groups. This would facilitate the identification of perception trends, the adjustment of communication strategies, and a more effective interpretation of discourse on social media. Furthermore, integrating these demographic data with NLP models optimized for linguistic variation would enable a more representative and accurate analysis of public opinion across both platforms.

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APPENDICES

Table 1. Metadata for X news.

Name	Description
author_id	user id
created_at	tweet creation date
text	tweet content
id	tweet id
fecha_inicio	start date of the download period
fecha_fin	end date of the download period

Table 2. Metadata for X replies.

Name	Description
original_tweet_id	tweet id from original news
user_id	user id From reply
reply_id	reply id
created_at	tweet creation date
text	reply content
fecha_inicio	start date of the download period
fecha_fin	end date of the download period

Tabla 3. Metadata for YouTube master.

Columm	Description
ID_VIDEO	id video
TITLE	video title
DATE	video publication date

Table 4. Metadata for YouTube comments.

Column	Description
ID_VIDEO	id video
COMMENT	text

Table 5. Dictionaries of words and phrases with positive and negative connotation.

Dictionaries	Content
Positive words/phrases	*'abrazo presidente', 'adelante presidente', 'admiro', 'admiracion', 'admirar', 'amado presidente', 'ama', 'amamos chaves', 'apoyo', 'aplaudimos', 'aplausos', 'bendecido', 'bendecidos', 'bendice', 'bendiciendo', 'bendiciendolo', 'bendicion', 'bendiciones', 'bendiga', 'bendito dios', 'bravo', 'bravo presi', 'brilla', 'buen trabajo', 'calidad', 'calidad de presidente', 'capacidad', 'contento', 'da gusto', 'dama de hierro', 'dios lo acompane', 'don rodrigo', 'dr rodrigo chaves', 'equipo de lujo', 'equipazo', 'excelencia', 'excelente', 'excelente residente', 'excelentisimo', 'estratega', 'felicito', 'felicitaciones', 'feliz', 'fuerza presi', 'gabinete de lujo', 'gloria a dios', 'gobierno ejemplar', 'gran presidente', 'grande chaves', 'grande presidente', 'grande presi', 'gracias a dios', 'gracias dios', 'habemus presidente', 'heroes', 'honradez', 'impecable', 'impresionante presidente', 'integro', 'integros', 'jaguar de costa rica', 'jaguar de oro', 'jaguar rodrigo chaves', 'jefe', 'joya de presidente', 'lider', 'lideres de presidencia', 'linda presi', 'magnifico', 'maravilla', 'maravillosa', 'maravilloso', 'mejor gobierno', 'mejor presidente', 'mejores presidentes', 'mejor presi', 'mi jaguar', 'mi presi', 'mi presidente', 'mi presidente chaves', 'mis respetos', 'nuestro jaguar', 'nuestro presi', 'nuestro presidente', 'orgullo', 'orgulloso', 'orgullosisima', 'orgullosisimo', 'patriota', 'prensa canalla', 'presidente chaves robles', 'presidente de verdad', 'presidente honesto', 'presidente rodrigo chaves robles', 'pueblo contigo', 'que crack', 'que manera', 'querido presidente', 'reconocimiento', 'respaldare', 'respetos', 'rodriguismo', 'sabiduria', 'satisfecha', 'satisfecho', 'senor presidente', 'sin excusas', 'solo bueno', 'solo calidad', 'soy un jaguar', 'sr presidente', 'sr rodrigo chaves', 'sueno hecho realidad', 'super gobierno', 'super presidente', 'te queremos', 'tenemos presidente', 'transparente', 'valentia', 'valiente presidente', 'vamos para adelante', 'viva chaves', 'viva chavez', 'viva costa rica', 'viva rodrigo'*
Negative words/phrases	*'abusador', 'acosador', 'aliento', 'apesta', 'apestoso', 'asco', 'asqueroso', 'bola de caca', 'borracho', 'borrachos', 'burro', 'cara de barro', 'carebarro', 'cavernicola', 'cavernicolas', 'chabacano', 'chabestia', 'chabestias', 'chavestia', 'chavestias','chavelo', 'chavemileikele', 'chavernicolas', 'chaveslandia', 'chavejetas', 'chanchada', 'chancho', 'charlanateria', 'chimuelo', 'choricear', 'choricero', 'chorizo', 'chorizos', 'chori-jaguar', 'cinico', 'cinismo', 'circo', 'controversia', 'controversias', 'cortina de humo', 'cortinas de humo', 'cago', 'cuentos', 'cuentos de mierda', 'cero credibilidad', 'contradice', 'debilitado', 'delicuente', 'delicuentes', 'desalmado', 'descarado', 'descarados', 'descompuesto', 'desgracia', 'deshonestidad', 'desgobierno', 'desmantelado', 'despotricando', 'desastre', 'desubicado', 'dictador', 'diablo repartiendo escapularios', 'distractores', 'evade responsabilidades', 'erudito de cantina', 'espectaculo', 'espantoso', 'estafador', 'estafadores', 'estupido', 'estupidos', 'excusa', 'excusas', 'falta de seriedad', 'falacia', 'falto de valores', 'fuck you', 'fracaso', 'fracasos', 'gobierno fallido', 'hablador', 'han comido la ronca', 'hdp', 'hedionda', 'hediondo', 'hp', 'imbecil', 'incompetente', 'improvisando', 'incapaces', 'incoherencia', 'incoherencias', 'inepto', 'infeliz', 'inutil', 'inutiles', 'irresponsable', 'jaguarcillo', 'jaguaro', 'jaguarsh', 'jaguacillo', 'jeton', 'jetonadas', 'jumas', 'ladrones', 'lucrar', 'malevolo', 'maldito', 'malparido', 'mamador', 'manipulador', 'manipuladores', 'marioneta', 'marionetas', 'maaasssss piiiiorrrrr', 'mediocridad', 'mentira', 'mentiras', 'mentiroso', 'mentirosos', 'miente', 'mintiendo', 'mierda', 'miserable', 'mueca', 'muecas', 'narco', 'narcochaves', 'narcoestado', 'narcogobierno', 'narcopresidente', 'narcos', 'narcodrigo', 'narcotrafico', 'narcisista', 'nauseas', 'nefasto', 'nefastos', 'no mienta', 'nos llevo puta', 'oportunistas', 'papachaves', 'papi chaves', 'parasito', 'patetico', 'payasada', 'payaso', 'payasos', 'pedestalitis', 'pendejadas', 'perdida', 'perra', 'perras', 'pesimo', 'pichaso', 'pichasos', 'pinocho chaves', 'politiqueria', 'populismo', 'populismos', 'porqueria', 'presimiente', 'prostituyo', 'prepotente de zapote', 'promesas vacias', 'propaganda', 'puta', 'que cascara', 'rata', 'ratas', 'retroceder', 'retroceso', 'ridiculo', 'riguito', 'robo', 'robar', 'rrrshodrigo', 'rrrsshodri', 'show', 'shows', 'sicopata', 'sin comerse la bronca', 'tapis', 'tierroso vulgar', 'titere', 'vagazo', 'vender humo', 'verguenza', 'viejo lesbiano', 'vulgar', 'vulgaridad', 'zoodri', 'zoodrigo', 'zoofilico'*

Table 6. X news with the highest number of replies.

Total replies	Text	User
100	Chaves: I know that you, people of Costa Rica, are fed up with so many things that stink in this country *('Chaves: Yo sé que ustedes, pueblo de Costa Rica, están hartos de tantas cosas que huelen mal en este país https://t.co/vuRxImo0WA')*	El mundo
100	https://t.co/fVwO4klVv6	Presidencia
100	#Country. During a scanner handover event, Chaves lashes out at the Comptroller's Office, the press, the lawmakers, and the Judiciary. *('#País. En acto de entrega de escáneres Chaves arremete contra la Contraloría, la prensa, los diputados y el Poder Judicial https://t.co/EgSMeewCZd')*	Semanario Universidas
100	Young people are the ones who support Rodrigo Chaves the least. *('Jóvenes son los que menos apoyan a Rodrigo Chaves https://t.co/RtoBpYcTfX')*	El mundo
100	Claudio Alpízar blames Rodrigo Chaves for the violence in stadiums. *('Claudio Alpízar culpa a Rodrigo Chaves de violencia en los estadios https://t.co/eQUCGgJLHW')*	El mundo

Total replies	Text	User
100	After President @RodrigoChavesR's statements, the @plncr announced the introduction of a bill to prevent it. *('Tras las declaraciones del presidente @RodrigoChavesR, el @plncr anunció la presentación de un proyecto de ley para impedirlo. 🏛️ 🚫🇨🇷 Más detalles aquí: https://t.co/9XmHB4Udbs* *¿Votaría por Rodrigo Chaves como diputado en el 2026?* *🆗 Sí / ❤️ No https://t.co/IfzI6CsXHB')*	La Republica
100	#MostRead2024 After the statements by President Rodrigo Chaves R., the National Liberation Party announced the introduction of a bill to prevent it. *('#LoMásLeído2024 Tras las declaraciones del presidente Rodrigo Cháves R., el Partido Liberación Nacional anunció la presentación de un proyecto de ley para impedirlo. 🏛️ 🚫🇨🇷 Más detalles aquí: https://t.co/qxQbXGLTg4* *¿Votaría por Rodrigo Chaves como diputado en el 2026?* *👍 Sí /... https://t.co/3JibeFXvNd https://t.co/o2CwSICnwu')*	La Republica
100	Constitutional Chamber gives Chaves' government three days to explain the entry of foreign military personnel without Congressional authorization. *('Sala IV da tres días al Gobierno de Chaves para que explique ingreso de militares extranjeros sin autorización del Congreso https://t.co/ClhjmK0vZ3')*	El mundo
100	Chaves questions whether Dinorah Barquero is a scoundrel, a fool who doesn't understand, or a liar. *('Chaves cuestiona si Dinorah Barquero: Es vagabunda, tonta que no entiende, o mentirosa https://t.co/x7Aif7q3ww')*	El mundo
100	#UH. Death threats confirmed against congresswomen Sofía Guillén from the FA and Andrea Álvarez from the PLN.The legislators received an email that even mentions bombings and hostage-taking in the Legislative Assembly *('#UH. Se confirman amenazas de muerte contra las diputadas Sofía Guillén, del FA y Andrea Álvarez, del PLN.* *Legisladoras recibieron correo electrónico que habla incluso de bombardeos y toma de rehenes en AL. https://t.co/R6hKwRc6My')*	Semanario
100	The security crisis has eased compared to last year, despite the Legislative Assembly not approving the security bills jointly proposed by the three branches of the Republic. *('La crisis de seguridad cesó en comparación al año pasado; a pesar que la Asamblea Legislativa no aprueba los proyectos de seguridad que los tres poderes de la República propuso en conjunto. https://t.co/GeKBEV1xsF')*	Presidencia
100	Ariel Robles: We need someone in the Presidential House who isn't drunk. *('Ariel Robles: Ocupamos alguien en Casa Presidencial que no esté borracho https://t.co/8vHX06o5zD')*	El mundo
100	Former PAC president to Chaves: Populism prevents solving the health crisis in prisons. *('Expresidenta del PAC a Chaves: El populismo impide resolver crisis sanitaria en cárceles https://t.co/VkPbC0fu4M')*	El mundo
100	Ottón Solís describes Rodrigo Chaves as the spokesperson of anger (*'Ottón Solís califica a Rodrigo Chaves como vocero del enojo https://t.co/0582udC72s'*)	El mundo
100	Navas: Raids at the CCSS force us to assess the level of corruption in this government. *('Navas: Allanamientos en la CCSS, nos obligan a valorar el grado de corrupción de este gobierno https://t.co/1UmGRQ0RMk')*	El mundo
100	Acuña criticizes Chaves' whiff of homophobia for comparing Ariel Robles to *'La Loca de Gandoca' ('Acuña critica tufo a homofobia de Chaves al comparar a Ariel Robles con La Loca de Gandoca https://t.co/dkcNn6CBW5')*	El mundo
100	Chaves' government is very inept, says Villalta. *('El Gobierno de Chaves es muy inepto, señala Villalta https://t.co/iEXyPRToK5')*	El mundo
100	Costa Rica grants political asylum to María Corina Machado and Edmundo González, as well as to those facing political persecution in Venezuela, especially individuals currently under the protection of the Argentine Embassy in Caracas. @EdmundoGU @MariaCorinaYA @OEA_oficial *('Costa Rica otorga asilo político a María Corina Machado y Edmundo González, así como a aquellas personas que sufran persecución política en Venezuela, especialmente a quienes están bajo protección de la Embajada Argentina en Caracas.* *@EdmundoGU @MariaCorinaYA @OEA_oficial... https://t.co/vOlKKZtuov https://t.co/IudXhxBaOR')*	Presidencia
100	Navas: Don Rodrigo Chaves, get out of that river, don't make a fool of yourself. *('Navas: Don Rodrigo Chaves, sálgase de ese río, no haga el ridículo https://t.co/YolL7W4iUK')*	El mundo
100	Sofía Guillén calls Rodrigo Chaves petty for mocking disaster victims. *('Sofía Guillén califica de mezquino a Rodrigo Chaves por burlarse de damnificados https://t.co/5MhBT2e3kQ')*	El mundo
100	Guillén claims that Chaves leads a narco-government that acts as a facilitator for criminal groups. *('Guillén asegura que Chaves tiene un narcogobierno que es un facilitador de los grupos criminales https://t.co/xrkR7TqKGK')*	El mundo

Total replies	Text	User
100	#Country. UCR supports journalists in response to Chaves' mockery and intimidation with bodyguards *('#País. UCR respalda a periodistas ante burlas de Chaves y amedrentamiento con guardaespaldas https://t.co/7labOWJX3G')*	Semanario
100	Sagot questions Chaves's mental health and labels him a de facto dictator and a universal aggressor. *('Sagot cuestiona salud mental de Chaves y lo tilda de dictador de facto y agresor universal https://t.co/sxYky0iC3C')*	El mundo
100	Chaves claims that his government has had to fight against the culture of bureaucracy and ineffectiveness. *('Chaves asegura que su gobierno ha tenido que luchar contra la cultura de la burocracia e inoperancia https://t.co/8X6ffRVKQP')*	El mundo
100	Chaves: If I have to go into a lake, into the sea, and swim with the crocodiles for them, I'll do it. *('Chaves: Si me tengo que meter a un lago, al mar y nadar con los cocodrilos, por ellos, lo hago https://t.co/8accUocy5P')*	El mundo
100	Faced with Rodrigo Chaves' most hardline far-right stance, the Broad Front has shifted toward the center, claims Antonio Ortega. *('Ante la ultraderecha más reacia de Rodrigo Chaves el Frente Amplio se corrió al centro, asegura Antonio Ortega https://t.co/MWOIYynHOH')*	El mundo
100	Rodrigo Chaves's movement will seek to win 45 seats in the 2026 elections. *('Movimiento de Rodrigo Chaves buscará obtener 45 curules en elecciones 2026 https://t.co/zjHiesv6gA')*	El mundo
100	Rodrigo Chaves: Don't you notice that money is stretching much more than before? ('*Rodrigo Chaves: ¿Usted no nota que la plata está alcanzando mucho más que antes? https://t.co/Nb6J2U729E')*	El mundo
100	#Country. The Jaguar Law would set back half a century of public spending control and anti-corruption efforts *('#País. Ley Jaguar retrocedería medio siglo de control de gasto público y lucha contra corrupción https://t.co/d1rgUsXqG3')*	Semanario
99	Rodrigo Chaves is an accident of democracy, claims Dinorah Barquero. *('Rodrigo Chaves es un accidente de la democracia, asegura Dinorah Barquero https://t.co/KFR2i9C7GU')*	El mundo
99	Antonio Álvarez: I haven't seen a more inefficient government when it comes to negotiating the FEES. *('Antonio Álvarez: No he visto un gobierno más ineficiente en la negociación del FEES https://t.co/sfDmKbr5R2')*	El mundo
97	Credibility in Rodrigo Chaves drops by 9 points in poll. *('Credibilidad en Rodrigo Chaves cae 9 puntos en encuesta https://t.co/gvUEwzv121')*	Nacion

Table 7. Sample of comments from X.

Reply	Classification
@presidenciacr Today on Improvising with Uncle Rrrssshodri! 😂 *('@presidenciacr Hoy en ¡Improvisando con tío Rrrssshodri! 😂')*	Neutral
@presidenciacr Dude Chavelo, you should seek help to stabilize yourself emotionally—today you speak positively, tomorrow negatively, you lash out at those who tell you the truth, talk about opportunities while cutting aid. You're a vulgar, lying, toxic fraud, a traitor who sold out the country. You're the worst... *('@presidenciacr Mae Chavelo deberías buscar ayuda para estabilizarte emocionalmente, hoy hablás positivo, mañana negativo, te agarrás con los que te dicen la verdad, hablás de oportunidades y recortaste las ayudas, sos un farsante mentiroso vulgar tóxico, traidor vende patria, sos lo peor.... ')*	Neutral
@presidenciacr Trying to steal fame and achievements. Very low, Chavelo *('@presidenciacr Intentando robar fama y logros. Muy bajo chavelo. ')*	Neutral
@presidenciacr Zoodrigo's eternal political campaign 😂😂😂 *('@presidenciacr La eterna campaña política de Zoodrigo 😂😂😂')*	Neutral
@delfinocrc Hahaha the whining Zoodri will do on Wednesday 🤣🤣🤣 *('@delfinocrc Jajaja la lloradera que se va pegar el miércoles el zoodri 🤣🤣🤣')*	Neutral
@presidenciacr Zoodri the narco-president, of course... Soon he'll either steal the scanners or send them to 'screw things up', whichever best serves his cartel... *('@presidenciacr Zoodri el narcopresidente, claro... Ahorita o se roba los escaneres, o los manda a 'joder', lo que más le sirva a su cartel... ')*	Neutral
@elmundocr We are in a new Costa Rica. The Costa Rica of the NarcoGovernment with the NarcoPresident @RodrigoChavesR and the criminal @PilarCisnerosGa *('@elmundocr Estamos en una nueva Costa Rica. La Costa Rica del NarcoGobierno con el NarcoPresidente @RodrigoChavesR y la delincuente @PilarCisnerosGa')*	Neutral

@presidenciacr HYPOCRITE ZOODRIGO *('@presidenciacr HIPÓCRITA ZOODRIGO')*	Neutral

Table 8. Sample of comments from YouTube.

Reply	Classification
Thank God we have an honest and hardworking president. God bless him. *('Gracias a Dios tenemos un presidente honesto y Trabajador dios lo bendiga')*	Neutral
What a great team the President has. Everyone fights equally hard. Many blessings will come down from above. They work together — thank God. MR. TEAM. 🙏🙏⚓️❤️ *('Qué Equipazo tiene el Sr.Presidemte.Todos se dan a la lucha por igual.Muchas bendiciones les bajaran de lo más alto.Trabajan juntos Gracias a Dios.SR.EQUIPO.🙏🙏⚓️❤️')*	Neutral
Thank you, Mr. President, and your government team. God bless you 🙏 *('Gracias señor presidente y a su equipo de gobierno Dios los bendiga 🙏')*	Neutral
Excellent work by the Executive. God bless our president. *('Exelente(sic) labor del ejecutivo Dios bendiga nuestro presidente')*	Neutral
Go ahead, my JAGUAR ❤️ *('Adelante mi JAGUAR ❤️')*	Neutral
Brilliant master move, my Jaguar ❤️ A thousand times re-election! ('*Brillante jugada maestra mi Jaguar ❤️ Reelección mil')*	Neutral
HABEMUS PRESIDENT CRCRCRCR ('*HABEMUS PRESIDENTE CRCRCRCR')*	Neutral
My president, simply the best 🥰🥰🥰👌👌💪💪💪 *('Mi presi simplemente lo mejor 🥰🥰🥰👌👌💪💪💪')*	Neutral

Table 9. Most frequent emojis in replies on X.

Emoji	Frequency	Percentage (%)
🤣	1161	20.88
😂	580	10.43
CR	316	5.68
💩	279	5.02
🤮	239	4.29
🤡	238	4.28
🦃	151	2.71
😅	105	1.88
👏	97	1.74
🤢	78	1.40
🚨	71	1.27
🖌️	55	0.98
😆	52	0.89
👇	50	0.84
😳	47	0.80

Emoji	Frequency	Percentage (%)
👏🏻	45	0.76
❤️‍🔥	42	0.65
🥹	36	0.63
👏🏻	35	0.61
🔥	34	0.56
😭	31	0.56
👍🏻	31	0.52
🙏🏻	29	0.50
📺	28	0.49
👨🏻‍💼	27	0.49

Table 10. Sample of usage of the most frequent emojis in replies on X.

Cuenta	Tweet original	Reply
@elmundocr	Ortega says Chaves is running out of fuel to govern. *('A Chaves se le está acabando la gasolina para gobernar, asegura Ortega https://t.co/Cy3lR9pnwI')*	@elmundocr 😂 😂 🤣 🤣 🤣 🤣 🤣 The worst of the worst — his last name fits him perfectly! @antoniorteguti honoring his buddy from the North — both are a pair of fools. I'm disgusted by them. *('@elmundocr 😂 😂 🤣 🤣 🤣 🤣 🤣 lo peor de lo peor , el apellido le queda como anillo al dedo! @antoniorteguti haciendole honor a su compinche del norte , los 2 son un par de imbeciles , me les cago Hpts 🖕🏻')*
@presidenciacr	We got to work, which is why we presented the new Jaguar Law project—so that the deputies can make a decision that will be vital for our country. *('Nos pusimos a trabajar, por eso presentamos el nuevo proyecto de Ley Jaguar, para que los diputados tomen una decisión que será vital para nuestro país. https://t.co/PbMLSDZHzt')*	@presidenciacr We got to work… 🤣 🤣 🤡 🤡 🤡 *('@presidenciacr Nos pusimos a trabajar … 🤣 🤣 🤡 🤡 🤡')*
@elmundocr	Minister: Technical Services report on Jaguar Law 2.0 is full of embarrassing errors. *('Ministra: Informe de Servicios Técnicos sobre Ley Jaguar 2.0 está lleno de errores vergonzosos https://t.co/jiraPALLLt')*	@elmundocr Such a novel puppet of the *'Jaguaro'* 🤣 🤣 🤣 🤣 *('@elmundocr Tan novedosa la marioneta del Jaguaro* 🤣 🤣 🤣 🤣*')*
@nacion	🚨 #BreakingNews | New Director of Presidential Press, Luis Carlos Monge, previously worked at Teletica and Multimedios. *(' 🚨 #ÚltimaHora | Nuevo director de Prensa de Presidencia, Luis Carlos Monge, laboró en Teletica y en Multimedios. https://t.co/JkYWMjifJd https://t.co/TTawxpUXjP')*	@nacion The field got even messier! 😂 🤷🏻‍♀️ . Pilar's doing, and the new cabinet member is pretty low-class. Because anyone who accepts a job from Rodrigo Ch has no dignity *('@nacion Se charralio más la cancha! 😂 🤷🏻‍♀️. Hechura de Pilar y bastante corriente el nuevo del gabinete. Porque quien le acepte brete a Rodrigo Ch no tiene dignidad. ')*
@elmundocr	College of Political Scientists clarifies to Chaves and Cisneros that they are qualified to conduct impartial analyses. *('Colegio de Politólogos le aclaran a Chaves y Cisneros que están capacitados para realizar análisis imparciales https://t.co/wLjnTXmK1b')*	@elmundocr 😅 🤣 😂

Cuenta	Tweet original	Reply
@elmundocr	Chaves to lawmakers: I preach love for the homeland, for the truth, and for the people. (‘Chaves a diputados: Yo predico amor a la patria, a la verdad y al pueblo https://t.co/pkaENLsAyp’)	😂😂😂😂😂😂😂 Chaves seriously looks like he does a line of coke before talking to the press lol 😂 *(‘@elmundocr 😂😂😂😂😂😂😂 Chaves legal se manda una línea de coca antes de hablar con la prensa alch 🥰’)*
@SemanarioU	#Breaking. Government representatives reject the FEES increase proposed by universities and walk out of the session amid students’ shouts and protests. *(‘#UH. Representantes de Gobierno no aceptan aumento del FEES propuesto por Universidades, y salen de la sesion en medio de gritos y reclamos de estudiantes. https://t.co/U79SWcQUIA’)*	@SemanarioU Let’s go, Minister! Don’t give in to this bunch of misfits! CR💪 *(‘@SemanarioU Vamos ministra! No afloje ante este montón de inadaptados! CR💪’)*
@presidenciacr	Costa Rica emerged victorious in the arbitration ruling over the international lawsuit filed by the Canadian company Infinito Gold regarding mining in Crucitas. The President of the Republic, Rodrigo Chaves Robles, explains the case. *(‘Costa Rica salió victorioso en el laudo por la demanda internacional de la empresa canadiense Infinito Gold sobre la minería en Crucitas.El Presidente de la República, Rodrigo Chaves Robles, explica el caso. https://t.co/htlp8Gk8o5’)*	@presidenciacr But you had nothing 💩 to do with this process. Stop talking nonsense and start working — you’ve spent two years acting like a backyard old man, blaming others without doing or achieving anything. *(‘@presidenciacr Pero Ud no tuvo ni 💩 q ver en este proceso deje de hablar Pendejadas y empiece a bretear, ya tiene dos años de estar de viejo de patio echando culpas sin hacer ni ver..^###ga. ’)*
@presidenciacr	Rodrigo Chaves’s lawyer on his suspension: If I weren’t a friend of the president, this wouldn’t have made the news. *(‘Abogado de Rodrigo Chaves, sobre su suspensión: Si no fuera amigo del presidente, esto no habría sido noticia https://t.co/np2x6Z6aIT’)*	@elmundocr Rat.! 🐀 Friend of the harasser.! *(‘@elmundocr Rata .! 🐀 amigo del acosador .! ’)*
@elmundocr	Chaves: We have reduced homicides despite the inaction of the Assembly and the leniency of the Judiciary. *(‘Chaves: Hemos reducido los homicidios a pesar de la inacción de la Asamblea y la alcahuetería del Poder Judicial https://t.co/2e7S1kTBJp’)*	@elmundocr Dude, on top of being ugly, he's abusive and big-mouthed 😠😠😠😠😠😠💩💩💩 *(‘@elmundocr Mae tras de Feo, Abusador , JETON 😠😠😠😠😠😠💩💩💩’)*
@presidenciacr	*National broadcast, Sunday, November 17. United for Costa Rica(‘Cadena nacional, domingo 17 de noviembre. Unidos por Costa Rica https://t.co/ptOODLkgfA’)*	@presidenciacr You are a filthy government, period. 😠 *(‘@presidenciacr Son una cochinada de gobierno, punto. 🥵’)*
@presidenciacr	* Video reference: Special Edition – Press Conference of September 24, 2024. *(‘https://t.co/fVwO4klVv6* **Video en referencia Edicion Especial Conferencia de Prensa del 24 de septiembre del 2024’)*	@presidenciacr “Special Edition”? Pfffttttt 🤡🤡🤡 *(‘@presidenciacr ‘Edición Especial’ ppfffttttt 🤡🤡🤡’)*
@elmundocr	Pilar Cisneros calls the Prosecutor’s Office’s arrest of the CCSS president a political show *(‘Pilar Cisneros califica de show político de la Fiscalía detención de presidenta de la CCSS https://t.co/o1yzSfhz2y’)*	@elmundocr The real show is what they put on every Wednesday at the Zapote circus — these 🤡🤡 every week. *(‘@elmundocr Show es el q montan todos los miércoles en el circo de zapote todos los miércoles estos 🤡🤡’)*

Cuenta	Tweet original	Reply
@elmundocr	SURVEY: Support for Rodrigo Chaves shows a slight improvement. *('ENCUESTA: Apoyo a Rodrigo Chaves experimenta una leve mejoría https://t.co/MYPag67fob')*	@elmundocr Everything is wrong with that abusive and vulgar man 🐓🐓🐓🐓🐓💩💩💩💩💩💩 *('@elmundocr Todo mal con ese abusador y pachuco* 🐓🐓🐓🐓🐓💩💩💩💩💩💩*')*
@presidenciacr	We got to work, which is why we presented the new Jaguar Law bill, so that lawmakers can make a decision that will be vital for our country. *('Nos pusimos a trabajar, por eso presentamos el nuevo proyecto de Ley Jaguar, para que los diputados tomen una decisión que será vital para nuestro país. https://t.co/PbMLSDZHzt')*	@presidenciacr You are a disgrace. What a shameless minister, such a liar. 🐓🐓🐓🐓 *('@presidenciacr Usted da vergüenza que ministra tan desvergonzada, me mentirosa,* 🐓🐓🐓🐓*')*

Table 11. Most frequent emojis in replies on YouTube.

Emoji	Frequency	Percentage (%)
CR	2999	19.03
❤️‍🩹	1779	11.29
👏	1464	9.29
👍	738	4.68
🎉	674	4.28
🙏	669	4.25
💪	558	3.54
🐆	541	3.43
😂	457	2.90
💯	451	2.86
👏🏻	360	2.28
👌	259	1.64
😊	153	0.97
😅	129	0.82
🙌	114	0.72
👉	107	0.68
😳	104	0.66
👋	102	0.65
👏🏽	101	0.64
🤦‍♂️	94	0.60

Emoji	Frequency	Percentage (%)
🤣	93	0.59
👏🏽	90	0.57
🙏🏻	87	0.55
📢	80	0.51
❤️	80	0.51
🤝	79	0.50

Table 12. Sample of usage of the most frequent emojis in replies on YouTube.

Headline	Comment
Live | Weekly press conference of the President of the Republic, October 30, 2024 *('En Vivo l Conferencia de prensa semanal del Presidente de la República, 30 de octubre 2024')*	The money is enough when it's not stolen 💯 💯 💯 CRCRCR 🐂 🐂 🐂 🐂 🐂 May God bless our President and his entire cabinet 🐂 🐂 CRCRCR 💯 💯 💯 💪 💪 💪 💪 *('La plata alcanza cuando no se la roban 💯 💯 💯 CRCRCR 🐂 🐂 🐂 🐂 🐂 Q Dios bendiga a nuestro Presidente y a todo su gabinete 🐂 🐂 CRCRCR 💯 💯 💯 💪 💪 💪 💪 ')*
Live | Weekly press conference of the President of the Republic, October 30, 2024 *('En Vivo l Conferencia de prensa semanal del Presidente de la República, 30 de octubre 2024')*	I love the way Mr. Nogui Acosta works and carries himself… He would make an excellent President. Mr. Tovar as well. Mrs. Fernández too. In short, they are all outstanding — truly exceptional. ❤️‍🩹 *('Me encanta como trabaja y se planta el Sr.Nogui Acosta..Serían un excelente Presidente.También el Sr.Tovar .La sra Fernandez.En fin todos son excelentes de lujo. ❤️‍🩹 ')*
Live | Weekly press conference of the President of the Republic, October 30, 2024 *('En Vivo l Conferencia de prensa semanal del Presidente de la República, 30 de octubre 2024')*	Long live the government that truly works for the people. May God bless the President and all his collaborators 👏 👏 👏 💯 *('Viva el Gobierno, que si trabaja para el pueblo, que Dios los bendiga Presidente y todos sus colaboradores 👏 👏 👏 💯')*
Live | Launch of the National Artificial Intelligence Strategy *('En Vivo l Lanzamiento de la Estrategia Nacional de Inteligencia Artificial')*	👍 Thank you very much, presidential team. Well said and well done. Prosperity and long life for Costa Rica 🙏 *(' 👍 Muchas Gracias equipo presidencial. Bien dicho y hecho. Prosperidad y larga vida para Costa Rica 🙏 ')*
Live | Launch of the National Artificial Intelligence Strategy *('En Vivo l Lanzamiento de la Estrategia Nacional de Inteligencia Artificial')*	Thank GOD for placing this Mr. President Rodrigo Chaves and his great team. We continue praying, and the people stand united with you ❤️ ❤️ ❤️ ❤️ 🎉 🎉 🎉 for Costa Rica. *('GRACIAS a DIOS por haber puesto a Este Sr. Presidente De.Rofigo CHAVES Y su Gran Equipo seguimos orando y el pueblo unidos con Usted ❤️ ❤️ ❤️ ❤️ 🎉 🎉 🎉 por C.R. ')*
Live | Weekly press conference of the President of the Republic, October 30, 2024 *('En Vivo l Conferencia de prensa semanal del Presidente de la República, 30 de octubre 2024') ')*	You are absolutely right, Mr. President. You have already informed us with complete clarity. In a warned war, no soldier dies — and there is no worse deaf person than the one who does not want to hear. May God help us understand the reality of the country. Those who want to turn everything into a piñata and deceive us are accomplices of the devil, because they lie. Thank you, Lord Jesus, for the president we have 🙏 🙏 *('Tiene toda la razón Señor Presidente. Ya nos informo con demasiada claridad . En guerra avisada no muere soldado , no hay peor sordo que el, que no quiere oír . Dios nos ayude para entender la realidad del país. Estos que quieren hacer piñata y engañarnos son secuaces del demonio, por mentirosos. Gracias señor Jesús por este presidente que tenemos 🙏 🙏 ')*
Live | Weekly press conference of the President of the Republic, October 30, 2024 *('En Vivo l Conferencia de prensa semanal del Presidente de la República, 30 de octubre 2024')*	Here with the whole family, fully connected and listening closely to the EXCELLENT PRESIDENT we have in Costa Rica, Mr. Rodrigo Chaves. All the people are with you CR 🇨🇷 *('Acá en familia full conectados escuchando con atención al EXCELENTE*

Headline	Comment
	PRESIDENTE que tenemos en Costa Rica Sr. Rodrigo Chaves todo el pueblo contigo CR💪🏻 *')*
Live | Weekly press conference of the President of the Republic, October 30, 2024 *('En Vivo l Conferencia de prensa semanal del Presidente de la República, 30 de octubre 2024')*	Thank you, Mr. President, for working for the people. Blessings 💯 🐂 💪 CRCR 💯 *('Gracias señor presidente por trabajar para el pueblo bendiciones* 💯 🐂 💪 *CRCR* 💯 *')*
Live | Weekly press conference of the President of the Republic, October 30, 2024 *('En Vivo l Conferencia de prensa semanal del Presidente de la República, 30 de octubre 2024')*	Long live the government that truly works for the people. May God bless you, Mr. President, and all your collaborators 👏 👏 👏 💯 *('Viva el Gobierno, que si trabaja para el pueblo, que Dios los bendiga Presidente y todos sus colaboradores* 👏 👏 👏 💯 *')*
Live | Launch of the National Artificial Intelligence Strategy *('En Vivo l Lanzamiento de la Estrategia Nacional de Inteligencia Artificial')*	Excellent — technological development guided by common sense, respect, and responsibility, to create a balance in equality and equity 🎉 💪 👏 ! Thank you ♾️ 🙏 🙏 🙏 to the government and cabinet of Mr. President Rodrigo Chaves Robles CR ❤️ CR 🦋 🌻 ! For the love of Costa Rica 🤞 ! *('Excelente , el desarrollo tecnológico de la mano con el sentido común y el respeto, así como la responsabilidad, para crear el equilibrio en Igualdad y en equidad* 🎉 💪 👏 *! Gracias* ♾️ 🙏 🙏 🙏 *al gobierno y gabinete del Sr Presidente Rodrigo Chaves Robles* CR ❤️ CR 🦋 🌻 *! Por Amor a Costa Rica* 🤞 *! ')*
National Broadcast – No more blah, blah, blah. Here are the results! *('CADENA NACIONAL - No más bla, bla, bla.¡Aquí están las obras! ')*	Excellent, Mr. President. May God bless you and protect you and your cabinet from all evil 🙏 👏 🙌 *('Excelente Señor presidente que Diosito los bendiga y proteja de todo mal a ust y su gabinete* 🙏 👏 🙌 *')*
Live | Weekly press conference of the President of the Republic, October 30, 2024 *('En Vivo l Conferencia de prensa semanal del Presidente de la República, 30 de octubre 2024')*	Better and better each time, Mr. President and government 👐 *('Cada vez mejor señor presidente y gobierno* 👐 *')*
National Broadcast – No more blah, blah, blah. Here are the results! *('CADENA NACIONAL - No más bla, bla, bla.¡Aquí están las obras! ')*	Excellent, Mr. President. May God bless you and protect you and your cabinet from all harm 🙏 👏 🙌 *('Excelente Señor presidente que Diosito los bendiga y proteja de todo mal a ust y su gabinete* 🙏 👏 🙌 *')*
Special press conference from the Southern Zone *('Conferencia de prensa especial desde la zona Sur')*	What a legend, my President Don Rodrigo Chaves and his whole team ❤️ ♥ ❤️ ❤️ ❤️ long live free Costa Rica and long live our President Don Rodrigo Chaves Robles, our national hero. Thank you, Bukele, and we look forward to welcoming you again very soon to this land of Costa Rica. A warm hug from afar to all honest governments. *('Que carga mi señor presidente don Rodrigo Chávez y todo su equipo* ❤️ ♥ ❤️ ❤️ *viva costa rica libre y viva nuestro presidente don Rodrigo Chávez Robles nuestro héroe nacional. Gracias bukele y le esperamos de nuevo y muy pronto en esta tierra de costa rica un abrazo a la distancia para los gobiernos honestos. ')*